NEW GRADUATE CONCENTRATION PROPOSALS
ARIZONA STATE UNIVERSITY
GRADUATE EDUCATION

This form should be used for academic units wishing to propose a new concentration for existing graduate degrees.

A concentration is a subspecialty within a degree and major. It indicates the fulfillment of a designated, specialized course of study, which qualifies the student with skills and training in one highly concentrated area of the major. Concentrations are formally-recognized educational designations (including the assignment of a university plan code for reporting/record-keeping purposes and appearance on the ASU transcript). Concentrations are distinguished from more informal academic distinctions such as "emphases," "tracks," "foci," "options," etc.

Submit the completed and signed (chairs, unit deans) proposal to the Office of Graduate Academic Programs, mail code 1003 and electronic copies to eric.wertheimer@asu.edu or amanda.morales-calderon@asu.edu.

Please type.

<table>
<thead>
<tr>
<th>Contact Name(s): Derrick Anderson</th>
<th>Contact Phone(s): 480-727-2337</th>
</tr>
</thead>
<tbody>
<tr>
<td>College/School/Division Name: College of Public Programs (COPP)</td>
<td></td>
</tr>
<tr>
<td>Academic Unit Name: School of Public Affairs (SPA) (or proposing faculty group for interdisciplinary proposals)</td>
<td></td>
</tr>
<tr>
<td>Existing Graduate Degree and Major under which this concentration will be established: Master of Public Policy (MPP)</td>
<td></td>
</tr>
<tr>
<td>Proposed Concentration Name: Science and Technology Policy</td>
<td></td>
</tr>
<tr>
<td>Requested Effective Term and Year: Fall 2014 (e.g. Fall 2014)</td>
<td></td>
</tr>
<tr>
<td>Do Not Fill in this information: Office Use Only</td>
<td></td>
</tr>
<tr>
<td>Plan Code:</td>
<td>CIP Code:</td>
</tr>
</tbody>
</table>

1. Overview

   A. Provide a brief description (not to exceed 150 words) of the new concentration (including the focus of the new concentration, relationship to other concentrations within this degree program, etc).

   The MPP in Public Policy, concentration in Science and Technology Policy provides knowledge and skills for students seeking or advancing careers in areas where science and technology are guided by public policy or where science and technology play an integral role in the policy process. This concentration emphasizes theories and research concerning the role of science in decision-making, complexity theory, institutional design of knowledge production organizations, national innovation systems, innovation and industrial policy, technology transfer and research evaluation.

2. Impact Assessment

   A. Explain the unit's need for the new concentration (e.g., market demand, research base, direction of the discipline, and interdisciplinary considerations). How will the new concentration complement the existing degree program, including enrollment, national ranking, etc.?

   The ASU School of Public Affairs is engaged in teaching and research in public administration, public policy, urban affairs, science and technology policy, and public finance and budgeting. Within this context, it is increasingly apparent that a vast spectrum of public policy issues deal closely with issues of science or technology. These include policy domains that oversee, evaluate or regulate scientific process or technology systems. Policy makers are increasingly faced with complex challenges with roots in some area of science or technology.
B. Please identify other related ASU programs and describe how the new concentration will complement these existing ASU programs? (If applicable, statements of support from affected academic unit administrators should be included with this proposal submission.)

The professional science masters (PSM) in science and technology, affiliated with the Consortium for Science, Policy and Outcomes at ASU (CSPO) is related to the proposed concentration. There is a strong thematic overlap between the PSM and the proposed concentration. Faculty affiliated with the PSM and the proposed concentration have collaborated in developing the concentration. The view taken by both parties (recognizing that there is some but not complete overlap in the individuals comprising both parties) is that the proposed concentration compliments the existing program in that it allows for creation of important courses and expands the sphere of ASU faculty engaged in teaching S&T policy at the graduate level.

C. Is this an interdisciplinary concentration? If yes, please address the relationship of the proposed concentration to other existing degree programs and any parallel or similar concentrations in those degree programs. (Please include relevant Memoranda of Understanding regarding this interdisciplinary concentration from all applicable academic units.)

Although some of the coursework will be offered through the Consortium for Science, Policy & Outcomes (CSPO), only students admitted to the MPP program will be able to pursue the concentration in Science and Technology Policy. The concentration is expected to attract students with a different focus—primarily those with an interest in public policy analysis— than those that enroll in existing programs. The goal is to differentiate the MPP program from others across the country and to enhance the educational experience and careers prospects for students enrolled in the MPP. Since the MPP focuses more on policy analysis and economics there should be no conflict or direct competition with other graduate programs offered at ASU.

### 3. Academic Requirements and Curriculum

A. What are the total minimum hours required for the major and degree under which the proposed concentration will be established?

42 credit hours

B. Please provide the admissions criteria for the proposed concentration. If they are identical to the admission criteria for the existing major and degree program under which this concentration will be established, you may attach a copy of these criteria as they appear on the departmental website, or other source (please indicate source).

Please also list all undergraduate and graduate degrees and/or related disciplines that are required for admission to this concentration program.

Applicants to the concentration will be accepted year-round. Students may be granted admission for Fall, Spring, or Summer semesters. Students must meet all Graduate Education admissions requirements. Potential applicants who hold a bachelor’s degree from a regionally accredited institution in a related field are eligible to apply to the program. Related fields include political science, sustainability, planning, business, urban and metropolitan studies, as well as other social science degrees. Although the target students for the graduate concentration would most likely come from the aforementioned degree fields— the department may accept applicants with undergraduate degrees from all educational backgrounds provide they meet the minimum requirements for the degree program.

The following entry level competencies are needed for admission to the program: an undergraduate social statistics course (such as PAF 301 Applied Statistics) along with previous course work in microeconomics course-work including coverage of market failure and public goods with a grade of B or higher. Suggested courses that will satisfy this entry level competency include PAF 201 Economics and Public Policy or PAF 504 Public Affairs Economics. An introduction to microeconomics course taken at either the undergraduate or graduate-level is sufficient to complete this competency. However, students who complete the graduate course may not use that class on their graduate Plan of Study. Students can complete deficiency classes prior to admission to the program or within their first semester after admission. Courses taken to satisfy entry level competencies cannot be used toward the completion of the MPP degree. Regular admission may be granted to applicants who have achieved a grade point average of 3.0 (on a 4.0 scale) or better in the last two years of work leading to a bachelor’s degree. GRE verbal, quantitative, and analytical scores will be used as one of the
indicators to see how competitive an applicant is within the applicant pool. Applicants will be required to submit an official
ASU graduate application, official GRE scores, official transcripts of all undergraduate and graduate course work, a
statement of career and educational goals, and three letters of recommendation (two of which should be academic
recommendations).

**Degree(s):** See paragraph above.

**GPA:** Minimum of a 3.00 cumulative GPA (scale is 4.0=A) in the last 60 hours of a student’s first bachelor’s degree
program. Minimum of 3.00 cumulative GPA (scale is 4.0 = A) in the applicable Master’s degree.

**English Proficiency Requirement for International Applicants:** (See Graduate Education policies and procedures)
(https://graduate.asu.edu/admissions/international/english_proficiency): Same as Graduate Education policy.

**Required Admission Examinations:** ☑GRE ☐GMAT ☐Millers Analogies ☐ None required

C. If the proposed concentration is part of a larger, interdisciplinary agenda, please provide additional admission information
related to students who may enter with various academic backgrounds, including expected entry-level competencies. As
applicable, please also address the courses that must be taken to remedy any relevant deficiencies for incoming students.

Not applicable

D. What knowledge, competencies, and skills (learning outcomes) should graduates have when they complete this proposed
concentration program? Examples of program learning outcomes can be found at (https://uoeee.asu.edu/program-outcomes).

At the conclusion of the concentration, student will be able to:

1. Demonstrate understanding of the critical components of the US scientific research and development enterprise
   including the various organizations that support, conduct and evaluate scientific research and development.
2. Analyze and evaluate public policies and associated programs related to science and technology.

<table>
<thead>
<tr>
<th>OUTCOME 1</th>
<th>Evaluate the critical components of the US scientific research and development enterprise including the various organizations that fund and conduct research and development.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure 1.1</td>
<td>Students in PAF 547 Science, Technology and Public Affairs will write a science and technology paper.</td>
</tr>
<tr>
<td>Performance Criterion 1.1</td>
<td>80% of students will earn a rating of 80% or higher on final science and technology policy paper.</td>
</tr>
<tr>
<td>Measure 1.2</td>
<td>Capability will be assessed through a student assessment instrument completed during the capstone course (which ranges from 1-5, with 1 signifying “very poor” and 5 signifying “very good”) in which students evaluate their understanding of program planning and evaluation.</td>
</tr>
<tr>
<td>Performance Criterion 1.2</td>
<td>Students completing the program, taking the student assessment in PAF 509 or 579, will have a mean score of at least 4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOME 2</th>
<th>Conduct systematic analyses of public policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure 2.1</td>
<td>Students in PAF 505 Public Policy Analysis will write a public policy paper.</td>
</tr>
<tr>
<td>Performance Criterion 2.1</td>
<td>80% of student will earn a rating or 80% or higher on final public policy paper.</td>
</tr>
<tr>
<td>Measure 2.2</td>
<td>Capability will be assessed through a student assessment instrument completed during the capstone course (which ranges from 1-5, with 1 signifying “very poor” and 5 signifying “very good”) in which students evaluate their understanding of program planning and evaluation.</td>
</tr>
</tbody>
</table>
signifying “very good”) in which students evaluate their understanding of policy analysis and implementation.

| Performance Criterion 2.2 | Students completing the program, taking the student assessment in PAF 509 or 579, will have a mean score of at least 4. |

E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 3.D. above?

A master’s committee that consists of department faculty is responsible for the assessment and evaluation of the program. The School of Public Affairs measures student’s learning at the start and conclusion of the MPP program. SPA faculty involved in teaching in overlapping/complementary areas of the MPP core curriculum meet twice annually to discuss the core agreements in each topical area and to provide guidance to faculty associates and adjuncts on syllabus construction and textbook selection. These core agreement groups are also involved in generating feedback on the extent to which the core agreements are appropriately tied to student assessments later in the program and how these ties can be strengthened.

Students complete a student assessment survey at the start of the program in which they indicate their level of knowledge for several key learning objectives, including their understanding of 1.) policy analysis and implementation, and 2.) program planning and evaluation. Students also complete the same survey at the conclusion of the program. This survey measures items related to program experiences, professional competencies, and employment. Comparison of these student assessment surveys provides the department with insight into student learning and program effectiveness.

In addition, the school uses course evaluations as a measurement tool to help steer content and learning outcomes for each required core course in the program.

The MPP degree requires students to demonstrate competency for public service by synthesizing and applying core knowledge, skills, and abilities to public service problems. Students demonstrate their public service competency by earning an A or a B in the required capstone course, PAF 509 Public Affairs Capstone or PAF 579 Public Policy Capstone. Either PAF 509 or PAF 579 is taken after completion of all required MPP coursework. The purpose of these courses is to serve as the culminating experience for students enrolled in the MPP in Public Policy program. In addition, students will be expected to achieve a mastery level or above (3.0 GPA or higher) in learning outcomes outlined for each concentration class.

Examples of assessment methods can be found at [http://www.asu.edu/oue/assessment.html](http://www.asu.edu/oue/assessment.html).

F. Please provide the curricular structure for the proposed concentration.

- Additionally, please ensure that all new required course proposals have been submitted to the Provost’s office through the Curriculum ChangeMaker online course proposal submission system for approval before this concentration is put on the University Graduate Council and CAPC agendas.

<table>
<thead>
<tr>
<th>Required Core Courses for the Degree</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Prefix &amp; Number) (Course Title)</td>
<td>(New Course?) (Yes or No?) (Insert Section Sub-total)</td>
</tr>
<tr>
<td>PAF 501 Public Service Research I</td>
<td>No 3</td>
</tr>
<tr>
<td>PAF 502 Public Service Research II</td>
<td>No 3</td>
</tr>
<tr>
<td>PAF 503 Public Affairs</td>
<td>No 3</td>
</tr>
<tr>
<td>PAF 505 Public Policy Analysis</td>
<td>No 3</td>
</tr>
<tr>
<td>PAF 540 Advanced Policy Analysis</td>
<td>No 3</td>
</tr>
<tr>
<td>(Prefix &amp; Number)</td>
<td>(Course Title)</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>PAF 541</td>
<td>Program Evaluation</td>
</tr>
<tr>
<td>PAF 570</td>
<td>Urban Economics and Public Finance</td>
</tr>
<tr>
<td>PAF 571</td>
<td>Geographic Information System (GIS) and Analysis</td>
</tr>
<tr>
<td>PAF 573</td>
<td>Advanced Regression</td>
</tr>
<tr>
<td>PAF 574</td>
<td>Diversity, Ethics &amp; Leading Public Change</td>
</tr>
</tbody>
</table>

**Required Concentration Courses**

- (Insert Section Sub-total) 6

**Elective or Research Courses**

(as deemed necessary by supervisory committee)

<table>
<thead>
<tr>
<th>(Prefix &amp; Number)</th>
<th>(Course Title)</th>
<th>(New Course?) Yes or No?</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSD 501</td>
<td>Science and Technology Policy</td>
<td>No</td>
<td>3</td>
</tr>
</tbody>
</table>

- (Insert Section Sub-total) 3

**Culminating Experience**

*E.g. - Capstone project, applied project, thesis (masters only) – 6 credit hours) or dissertation (doctoral only) – 12 credit hours) as applicable*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAF 509—Public Affairs Capstone</td>
<td>3</td>
</tr>
<tr>
<td>PAF 579—Public Policy Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Total required credit hours: 42

*Students choose PAF 509 OR PAF 579 as the culminating experience.*

G. Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). **Please note:** If this proposed initiative will be offered completely online, clearly state that in this section, and fill out the applicable section in the Operational Appendix.

The concentration will be delivered in person, although individual courses may be offered in as iCourses.

H. Please describe the culminating experience(s) required for completion of the existing degree and major, and the proposed concentration (e.g., thesis, dissertation, comprehensive exams, capstone course(s), practicum, applied projects, etc.).

The MPP degree requires students to demonstrate competency for public service by synthesizing and applying core knowledge, skills, and abilities to public service problems. Students demonstrate their public service competency by earning an A or a B in the required capstone course, **PAF 509 Public Affairs Capstone or PAF 579 Public Policy**.
**Capstone.** Either PAF 509 or PAF 579 is taken after completion of all required MPP coursework. The purpose of these courses is to serve as the culminating experience for students enrolled in the MPP in Public Policy program.

The Capstone course is a forum in which students have the opportunity to bring together the skills and knowledge acquired in the MPP program, polish their skills, and further develop their sense of professional personal identity. Capstone instructors use a combination of a wide variety of projects and tasks, aimed at practice in skills targeted in the objectives above. Instructors use speakers, research projects, role playing, oral presentations, case analyses, class participation, and team taskforce work to address these skills.

The proposed concentration does not require completion of culminating experiences beyond what is required for completion of the existing MPP degree.

I. **Please describe** any other requirements for completion of the existing degree and major, and the proposed concentration (e.g., internships, foreign language skills, etc.).

The MPP degree focuses on preparing students for careers in public service. Many of our students are currently working in government or nonprofit management, so an internship is not required for the concentration. However, a public service internship is recommended for those students without previous administrative experience in government. The purpose of the internship is to provide students with practical and professional experience in a specific career area. Students work in and for public organizations applying the knowledge, skills, and abilities acquired in their plan of study. During the internship experience, students can develop a professional network that will aid them in their pursuit of a career in local government organizations. Students can apply three credit hours of internship credit to the degree program as an elective.

The School of Public Affairs serves as a link between ASU and governmental agencies. The School is active in developing governmental internships and placing graduates, and already have an established internship program with many local governments, including City of Phoenix, Tempe, Avondale, Maricopa, and Scottsdale. The internship program operates on a year-round basis. This enables the School of Public Affairs to be responsive to the needs of various agencies whenever they experience heavy workload periods, demands for special projects, and needs for additional personnel. It also allows students to schedule an internship at a time most convenient to them during their academic program. The internship is coordinated by participating concentration faculty and professional staff within the department.

J. **For interdisciplinary programs,** additional sample curricular structures must be included as appendix items to this proposal relating to students with various academic backgrounds who may pursue the proposed concentration, including expected mastery of core competencies (e.g., course work, skills, and/or knowledge).

Although the courses offered as part of the concentration are interdisciplinary in nature, only admitted MPP students will be allowed to pursue the concentration. Although students from other degree programs may elect to take PAF 547 as part of their curriculum and MPP students will take HSD 501 from CSPO and may take elective courses from other ASU departments, the impact on any other program is anticipated to be negligible.

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### 4. Administration and Resources

A. **How will the proposed concentration be administered (including recommendations for admissions, student advisement, retention etc.)?** Describe the administering body in detail, especially if the proposed concentration is part of a larger interdisciplinary initiative. How will the graduate support staffing needs for this proposed concentration program be met?

The concentration will be administered by the School of Public Affairs’ graduate director who, along with the Master’s Committee, is responsible for the overseeing and implementing all masters-level programs in the department.

The graduate director is responsible for evaluating all admission applications and any issues relating to the curriculum. Any exceptions to program policy and curriculum are at the discretion of the director. Curriculum changes to core course requirements, as well as the culminating experience course must be submitted to and approved by Graduate Education. Each student is assigned a faculty advisor with an area of specialization in Policy Informatics (see #4. D. below for a...
A. Each advisor is responsible for any initial advising on the program, electives, and career information.

In addition, the department’s full-time administrative staff will be responsible for monitoring student progress, providing information regarding internship/job placement opportunities, processing petitions, plans of study, graduation applications, and other relevant graduate forms and procedures.

B. How many students will be admitted immediately following final approval of the concentration? What are enrollment projections for the next three years?

Expected enrollment in the MPP concentration in Science and Technology Policy is 40 students by Year 5.

<table>
<thead>
<tr>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td># Students</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

C. What are the resource implications for the proposed concentration, including any projected budget needs? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this concentration please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this concentration.

- Current Library Relevant Holdings: Current library resources are sufficient to support this program.
- Additional Library Acquisitions Needed: None. Current library resources are sufficient to support this program.
- Existing Physical Facilities: Current classroom facilities on the Downtown Phoenix campus are adequate to support this program.
- Additional Facilities Required or Anticipated: Current classroom facilities on the Downtown Phoenix campus are adequate to support this program for the first three years.
- Other Support Now Available: The School’s support staff includes an Executive Assistant, Public Policy Liaison, Academic Support Specialist, Senior Specialist, Career Services Manager and Senior Office Assistant.
- Other Support Needed, Next Three Years: Current department staff is sufficient to support the faculty and student service resources required for this program.

D. Please list the primary faculty participants in this proposed concentration.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Area(s) of Specialization as they relate to proposed concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry Bozeman</td>
<td>Professor, SPA</td>
<td>Organization theory, public management, technology management, policy evaluation, science and technology policy, higher education policy.</td>
</tr>
<tr>
<td>Clark Miller</td>
<td>Associate Professor, Politics and Global Studies Faculty Affiliate, SPA</td>
<td>Science, technology &amp; globalization, with a particular emphasis on the design and critical analysis of knowledge systems in support of international and global policymaking.</td>
</tr>
<tr>
<td>David Guston</td>
<td>Professor, Politics and Global Studies Faculty Affiliate, SPA</td>
<td>Research and development policy, technology assessment, public participation in science and technology, and the politics of science policy.</td>
</tr>
<tr>
<td>Derrick Anderson</td>
<td>Assistant Professor, SPA</td>
<td>Organizational theory and behavior, public management, research and development policy and management</td>
</tr>
<tr>
<td>Elizabeth Corley</td>
<td>Associate Professor, SPA</td>
<td>Technology policy and environmental policy.</td>
</tr>
<tr>
<td>Daniel Sarewitz</td>
<td>Professor, School of Life Sciences</td>
<td>Science and technology policy, research and development policy, decision making, technology assessment, climate policy</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Research Focus</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Erik Johnston</td>
<td>Associate Professor, SPA</td>
<td>Building capacity in Policy Informatics by researching how computational and communication technologies, including models and simulations, help individuals, groups, and communities design and evaluate governance infrastructures.</td>
</tr>
<tr>
<td>Karen Mossberger</td>
<td>Professor and Director, SPA</td>
<td>Local governance, urban policy, digital inequality, e-government, evaluating policy impacts of information technology, policy diffusion and innovation.</td>
</tr>
<tr>
<td>Kevin Desouza</td>
<td>Associate Professor, SPA</td>
<td>Policy informatics, strategic information systems, networks, knowledge transfer, innovation policy, globalization, organizational design.</td>
</tr>
<tr>
<td>Michael Crow</td>
<td>Professor, SPA University President</td>
<td>Public administration, organizational theory, science and technology policy, sustainability, environmental policy</td>
</tr>
<tr>
<td>Rick Shangraw</td>
<td>Professor of Practice, SPA</td>
<td>Public administration, organizational theory and behavior, decision making, science and technology policy</td>
</tr>
<tr>
<td>Spiro Maroulis</td>
<td>Assistant Professor, SPA</td>
<td>Public policy analysis; Policy informatics; Social network analysis; Agent-based modeling; Innovation implementation; Educational policy and entrepreneurship.</td>
</tr>
<tr>
<td>Yushim Kim</td>
<td>Associate Professor</td>
<td>Policy analysis, public health, welfare and human services and policy, environmental justice, policy and planning, systems thinking, agent-based modeling.</td>
</tr>
</tbody>
</table>

**E.** Is there a graduate faculty structure for this concentration program that will differ from the original degree program graduate faculty structure (for PhD programs only)? If yes, please include the name of the graduate faculty group and whether they will participate in offering this concentration.

None
5. Additional Material — Please attach any additional information that you feel relates to the proposed concentration. (Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

Approvers (if the proposal submission involves multiple units, please include letters of support from those units)

<table>
<thead>
<tr>
<th>DEPARTMENT CHAIR or SCHOOL DIRECTOR</th>
<th>SIGNATURE</th>
<th>DATE</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>DEAN (Please print or type)</th>
<th>Signature</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathleen Andereck</td>
<td></td>
<td>1/30/14</td>
</tr>
</tbody>
</table>

The following section will be completed by Graduate Education following the recommendations of faculty governance bodies.

<table>
<thead>
<tr>
<th>VICE PROVOST FOR GRADUATE EDUCATION</th>
<th>SIGNATURE</th>
<th>DATE</th>
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<tbody>
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</tbody>
</table>

Please note: Proposals for new concentrations also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate (Information item only), and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.
APPENDIX I
OPERATIONAL INFORMATION FOR GRADUATE PROGRAMS
(This information is used to populate the Graduate Programs Search/catalog website.)

1. Provide a brief (catalog type - no more than 150 words) program description.
   The MPP in Public Policy, concentration in Science and Technology Policy provides knowledge and skills for students seeking or advancing careers in areas where science and technology are guided by public policy or where science and technology play an integral role in the policy process. This concentration emphasizes theories and research concerning the role of science in decision-making, complexity theory, institutional design of knowledge production organizations, national innovation systems, innovation and industrial policy, technology transfer and research evaluation.

2. Campus(es) where program will be offered:
   * To select desired box, place cursor on the left side of the box, right click mouse, select Properties, under Default Value select Checked, press OK and the desired box will be checked.
   ☐ ASU Online only (all courses online) – (Office of the Provost and ASU Online approval is needed)
   All other campus options (please select all that apply):
   ☑ Downtown ☐ Polytechnic
   ✓ Tempe ☐ West
   ☐ Both on-campus and ☐ ASU Online (*) – Office of the Provost and ASU Online approval is needed for this option. (Check applicable campus from options listed).

3. Keywords: (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)
   public policy, science and technology policy, innovation policy, technology management, technology policy, environmental policy

4. Area(s) of Interest:
   * To select desired box, place cursor on the left side of the box, right click mouse, select Properties, under Default Value select Checked, press OK and the desired box will be checked

   A. Select one (1) primary area of interest from the list below that applies to this program.

   ☑ Architecture & Construction ☐ Interdisciplinary Studies
   ☑ Arts ☐ Law & Justice
   ☑ Business ☐ Mathematics
   ☑ Communication & Media ☐ Psychology
   ☑ Education & Teaching ☐ STEM
   ☑ Engineering & Technology ☐ Science
   ☑ Entrepreneurship ☐ Social and Behavioral Sciences
   ☑ Health & Wellness ☐ Sustainability
   ☑ Humanities

   B. Select one (1) secondary area of interest from the list below that applies to this program.

   ☑ Architecture & Construction ☐ Interdisciplinary Studies
   ☑ Arts ☐ Law & Justice
   ☑ Business ☐ Mathematics
   ☑ Communications & Media ☐ Psychology
   ☑ Education & Teaching ☐ STEM
   ☑ Engineering & Technology ☐ Science
   ☑ Entrepreneurship ☐ Social and Behavioral Sciences
   ☑ Health & Wellness ☐ Sustainability
   ☑ Humanities
# APPENDIX II

**Sample Plan of Study – MPP (Science and Technology Policy concentration)**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAF 501 Public Service Research I</td>
<td>PAF 502 Public Service Research II</td>
<td>PAF 547 Science, Technology and Public Affairs</td>
<td>PAF 509 Public Affairs Capstone OR PAF 579 Public</td>
</tr>
<tr>
<td>PAF 503 Public Affairs</td>
<td>PAF 540 Advanced Policy Analysis</td>
<td>PAF 571 Geographic Information Systems (GIS) &amp;</td>
<td></td>
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<tr>
<td>PAF 505 Public Policy Analysis</td>
<td>PAF 541 Program Evaluation</td>
<td>Analysis</td>
<td></td>
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<tr>
<td>PAF 574 Diversity, Ethics &amp; Leading Public Change</td>
<td>PAF 570 Urban Economics and Public Finance</td>
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<td>PAF 573 Advanced Regression</td>
<td>HSD 501 Science and Technology Policy</td>
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<td>Elective *</td>
</tr>
</tbody>
</table>

*Choose from: HSD 502, 598, PAF 525 or PAF 546

**Highlighted courses** – concentration courses
(NEW GRADUATE INITIATIVES)

PROPOSAL PROCEDURES CHECKLIST

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

☐ Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals.
  - Establishment of new curricular initiative requests; degrees, concentrations, or certificates
  - Rename requests; existing degrees, concentrations or certificates
  - Disestablishment requests; existing degrees, concentrations or certificates

☐ Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.
  - Additional information can be found at the Provost’s Office Curriculum Development website: Courses link
  - For questions regarding proposing new courses, send an email to: courses@asu.edu

☐ Prepare the applicable proposal template and operational appendix for the proposed initiative.
  - New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: Academic Programs link

☐ Obtain letters or memos of support or collaboration. (if applicable)
  - When resources (faculty or courses) from another academic unit will be utilized
  - When other academic units may be impacted by the proposed program request

☐ Obtain the internal reviews/approvals of the academic unit.
  - Internal faculty governance review committee(s)
  - Academic unit head (e.g. Department Chair or School Director)
  - Academic unit Dean (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

Additional Recommendations - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate Education strongly recommends that academic units establish after the program is approved for implementation.

☐ Set-up a Graduate Faculty Roster for new PhD Programs – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to http://graduate.asu.edu/graduate_faculty_initiative.

☐ Establish Satisfactory Academic Progress Policies, Processes and Guidelines – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/faculty_staff/policies and scroll down to the academic progress review and remediation processes (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

☐ Establish a Graduate Student Handbook for the New Degree Program – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and Procedures website. Please go to http://graduate.asu.edu/faculty_staff/policies to access Graduate Policies and Procedures.
Julie,

Attached is a proposal from the School of Public Affairs for a concentration in Science and Technology Policy within the Master of Public Policy. Also included is a signature page and the appropriate support letters.

Kathy

***************

Kathleen Andereck
Associate Dean, College of Public Programs
Director and Professor, School of Community Resources and Development
Arizona State University
Mail Code 4020, 411 North Central Avenue, Suite 550 Phoenix, Arizona 85004-0690
Phone: (602) 496-1056 | Fax: (602) 496-0953 | E-mail: kandereck@asu.edu
Date: January 30, 2014

To: University Curriculum Committee

From: Kathleen Andereck, Associate Dean

Re: Master of Public Policy (Science and Technology Policy)

This memo is to confirm support from the College of Public Programs for the concentration in Science and Technology Policy within the Master of Public Policy. Courses will be included from the School of Public Affairs and the Consortium for Science, Policy and Outcomes. The College is pleased to be able to offer this concentration.
January 24, 2014

To: Jonathan Koppell, Dean  
Kathleen Andereck, Associate Dean  
College of Public Programs

From: Karen Mossberger, Director  
School of Public Affairs

Attached is the proposal to establish a graduate concentration in Science and Technology Policy for the Master of Public Policy (M.P.P.) degree. The M.P.P. concentration in Science and Technology Policy provides knowledge and skills for students seeking or advancing careers in areas where science and technology are guided by public policy or where science and technology play an integral role in the policy process. This concentration emphasizes theories and research concerning the role of science in decision-making, complexity theory, institutional design of knowledge production organizations, national innovation systems, innovation and industrial policy, technology transfer and research evaluation.

The concentration has been reviewed and approved by the School of Public Affairs graduate committee and by the School’s faculty as a whole.

The concentration relies on existing courses that are regularly offered as part of the graduate curriculum in the School of Public Affairs and the Consortium for Science, Policy and Outcomes. No additional faculty or staff will be needed to implement this concentration.
January 8, 2014

Office of Graduate Academic Programs
Graduate Education
Mail Code 1003
Arizona State University

Statement of Support for the Concentration in Science & Technology Policy

As faculty director of the Professional Science Master’s (PSM) in Science and Technology Policy, I support the proposed concentration in science and technology policy in the Master of Public Policy degree as a complementary degree program. As proposed, this new concentration within the School of Public Affairs will benefit the existing PSM in several important ways.

- Perhaps most importantly, it will increase the overall demand for and deepen the pool of excellent, cutting edge coursework available in S&T policy to students in both programs, thus raising the level of and diversifying the skills training available in the field at ASU.
- As a result, it will enhance ASU’s ability to recruit and train the best students in both programs.
- It will also bring greater attention to ASU as a global leader for training in science & technology policy, thus helping attract more and better students from around the world.
- It will thus strengthen ASU’s ability to recruit and retain the country’s top faculty in S&T policy and to successfully compete for external funding in the field for education and research.
- It will encourage further investment by ASU in strong S&T policy initiatives and faculty that will benefit both programs.

I therefore strongly endorse this proposal.

Sincerely,

Clark Miller
Associate Professor of Science Policy and Political Science
Program Director, PSM in Science and Technology Policy
Associate Director, Consortium for Science, Policy and Outcomes